

IMMUNOSCINTIGRAPHY WITH ANTIMELANOMA MONOCLONAL ANTIBODIES IN THE DIAGNOSIS OF CHOROIDAL MELANOMAS.

LOCARNO C.M.,<sup>2</sup> BALESTRAZZI AN.,<sup>1</sup> FASOLINO G.,<sup>1</sup> MANGANELLI C.,<sup>1</sup> GRECO I.M.,<sup>2</sup> BLASI M.A.,<sup>3</sup> CALCAGNI M.L.,<sup>4</sup> AND GIORDANO A.<sup>4</sup>

<sup>1</sup>DEPARTMENT OF OPHTHALMOLOGY, CATHOLIC UNIVERSITY OF ROME (I)

<sup>2</sup>DEPARTMENT OF EXPERIMENTAL MEDICINE, UNIVERSITY OF L'AQUILA (I)

<sup>3</sup>DEPARTMENT OF OPHTHALMOLOGY, UNIVERSITY OF L'AQUILA (I)

<sup>4</sup>DEPARTMENT OF NUCLEAR MEDICINE, CATHOLIC UNIVERSITY OF ROME (I)

**PURPOSE.** The diagnosis of choroidal melanoma is usually performed by binocular indirect ophthalmoscopy, A- and B-scan ultrasonography and fluorescein angiography. However, in cases with opaque media, ancillary techniques are needed for a correct diagnosis. The aim of this study is to evaluate the role of radioimmunoscintigraphy with monoclonal antibodies in patients with choroidal melanomas.

**METHODS.** 24 patients underwent radioimmunoscintigraphy: 13 patients were affected by a choroidal melanoma, while 11 patients were controls. F(ab')<sub>2</sub> fragments of 225.28S antimelanoma antibodies labelled with 740 MBq of Tc99m (Technemab-Sorin, Italy) were intravenously injected to all patients. Planar scintigraphy was performed 24 hours later. Images were evaluated by two experienced observers.

**RESULTS.** We obtained 10 true-positive results, 1 false-positive, 10 true-negatives and 3 false-negatives; thus, sensitivity was 76.9%, specificity 90.9% and accuracy 83.3%.

**CONCLUSIONS.** High values of sensitivity of radioimmunoscintigraphy in choroidal melanomas have been reported in literature, while specificity has never been evaluated to date. In this study we have obtained both high sensitivity and specificity values, therefore the technique employed deserves to be performed when the diagnosis remains unclear after the common ocular examinations.